

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
REGIONAL OFFICE No. IV-A
BATANGAS 2ND DISTRICT ENGINEERING OFFICE
KUMINTANG ILAYA, BATANGAS CITY

C.Y. 2025 PROJECT
DETAILED ENGINEERING DESIGN PLAN FOR
**CONCRETING OF BRGY. NAGTOCTOC FMR, BRGY. NAGTOCTOC,
LOBO, BATANGAS**
LOBO, BATANGAS
STA. 0+000.00 - STA. 0+260.00
TOTAL LENGTH = 260.00 L.M.

START
LATITUDE: 13.6775117N
LONGITUDE: 121.2571817E

END
LATITUDE: 13.6776076N
LONGITUDE: 121.2548174E

SUBMITTED:

GEMMA L. OLAN
CHIEF, PLANNING AND DESIGN SECTION
DATE:

RECOMMENDED:









ARIEL V. ARMEDILLA
ASSISTANT DISTRICT ENGINEER
DATE:

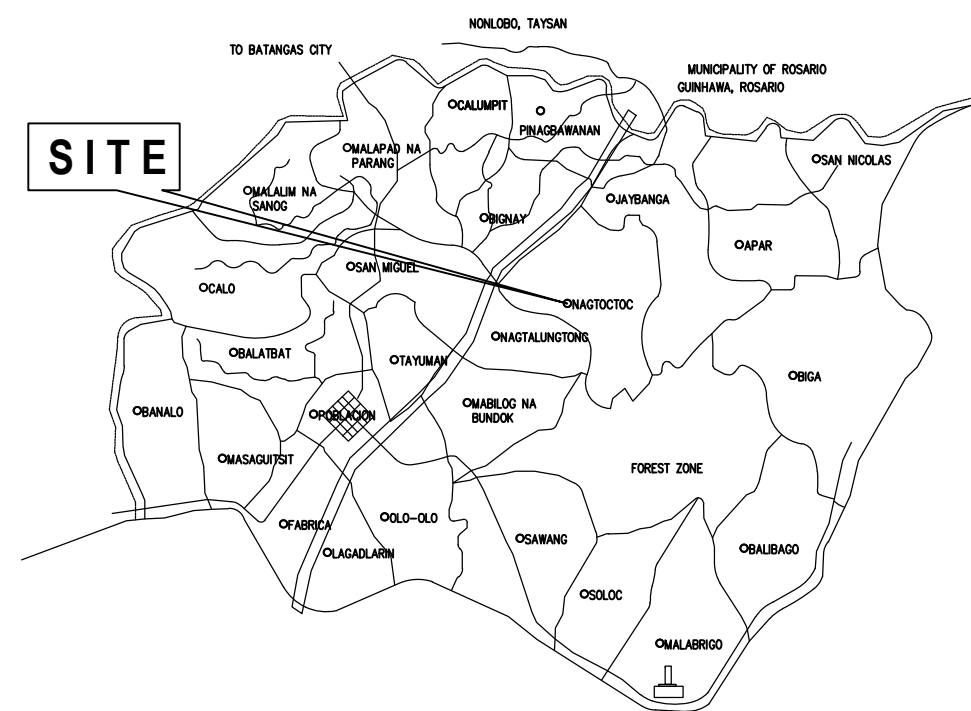
APPROVED:

SONIA D. PAGLICAUAN
DISTRICT ENGINEER
DATE:

INDEX OF DRAWINGS





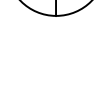


A. GENERAL

	COVER PAGE
	INDEX OF DRAWINGS, LOCATION MAP, VICINITY MAP & LAYOUT PLAN
	MATERIALS MAP AND DISPOSAL MAP
	GENERAL NOTES, LEGEND & ABBREVIATIONS
	SUMMARY OF QUANTITIES
	DPWH PROJECT STANDARD BILLBOARD
	TRAFFIC MANAGEMENT PLAN
	PROJECT MARKER DETAILS








LOCATION MAP

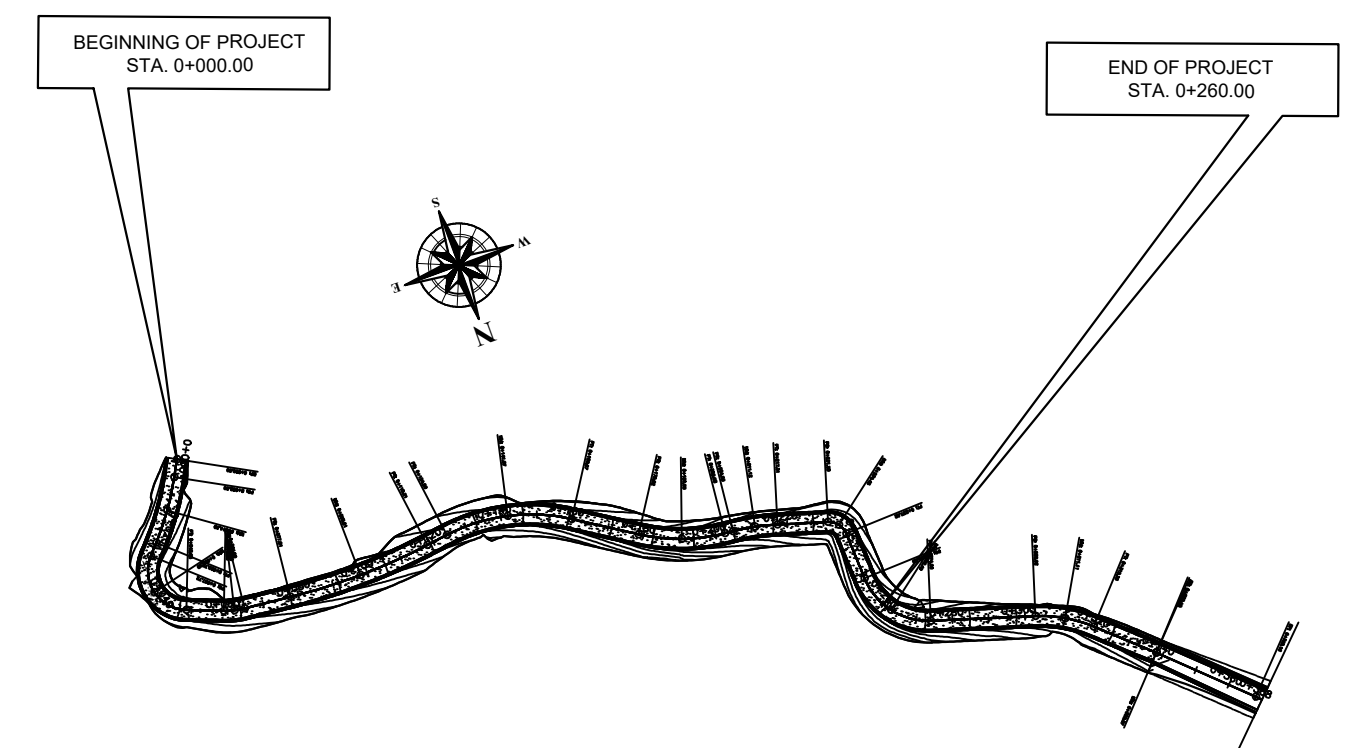
B. ROADS

	TYPICAL CROSS SECTION STRAIGHT-LINE DIAGRAM
	DETAILS STONE MASONRY
	CROSS DRAIN DETAILS SECTION A-A' APRON (TOP VIEW)
	STANDARD PORTLAND CEMENT CONCRETE PAVEMENT
	GEOMETRIC DESIGN STANDARD SUPER ELEVATION AND PAVEMENT WIDENING
	GEOMETRIC DESIGN STANDARD HORIZONTAL AND VERTICAL
	SCHEDULE OF QUANTITIES



VICINITY MAP

	PLAN AND PROFILE STA. 0+000.00 - STA. 0+260.00
	CROSS SECTION STA. 0+000.00 - STA. 0+060.00
	CROSS SECTION STA. 0+080.00 - STA. 0+140.00
	CROSS SECTION STA. 0+160.00 - STA. 0+220.00
	CROSS SECTION STA. 0+240 - STA. 0+260



LAYOUT PLAN

MATERIALS MAP



NAME OF SOURCE : IKM BATCHING PLANT
LOCATION:
a. STATION : 153+400
b. BARANGAY : SABANG
c. TOWN/CITY : IBAAN
d. PROVINCE : BATANGAS
e. DISTANCE (from Project Site) : 42.00 km

LIST OF PRODUCT:
a. CONCRETE MIX

PRODUCTION OUTPUT : 75.00 m³/Hour

OWNER : IKM BATCHING PLANT CORPORATION

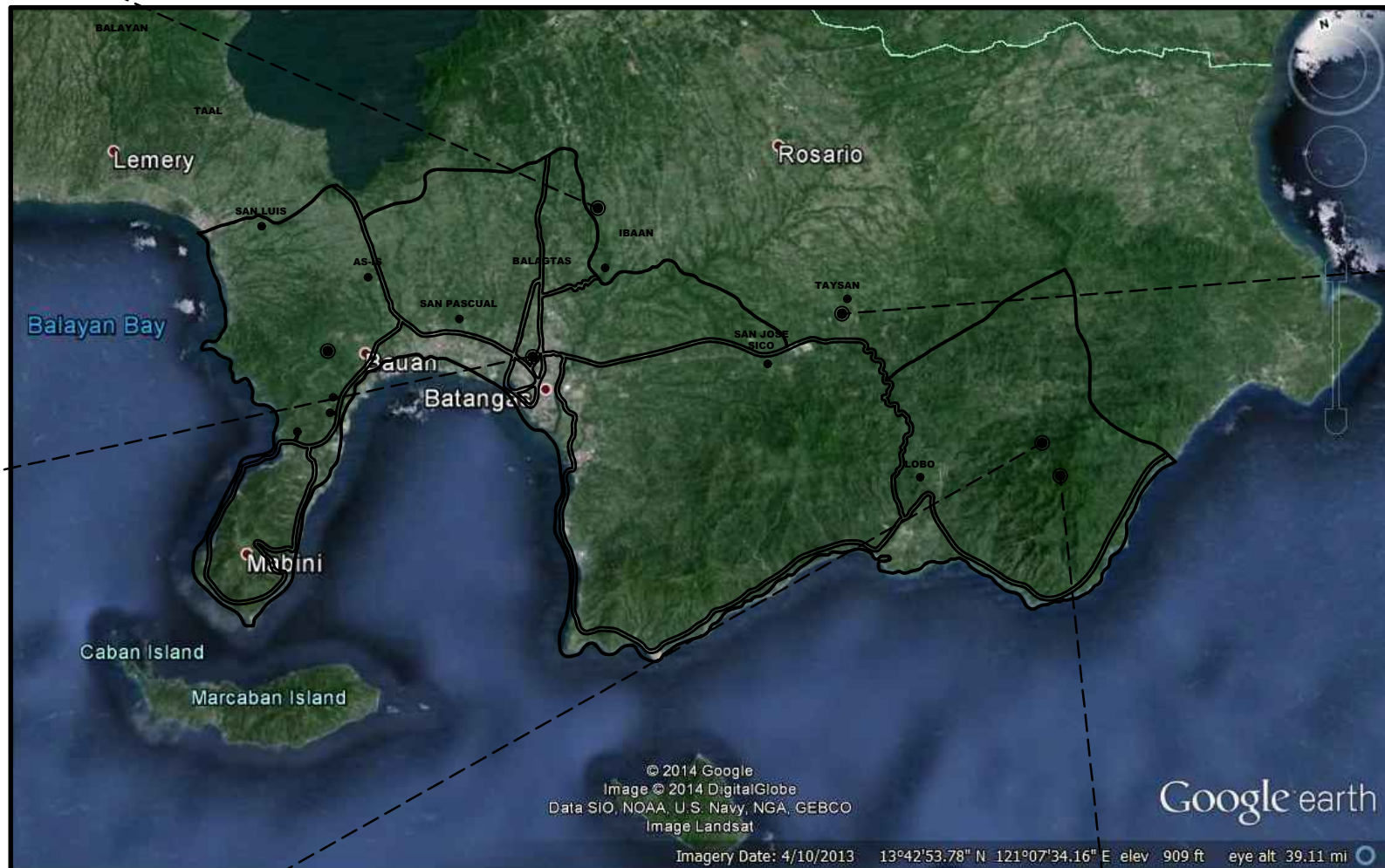
NAME/LOCATION OF SOURCE:
a. LA FARGE CEMENT
Mapulo, Taysan, Batangas
b. COARSE AGGREGATES
1. Taysan, Batangas
c. FINE AGGREGATES
1. Zambales



DISTRICT ENGINEERING OFFICE
BATANGAS SECOND DISTRICT ENGINEERING OFFICE
LOCATION:
a. STATION : ALONG CADRE ROAD K0106+233
b. BARANGAY: KUMINTANG ILAYA
c. TOWN/CITY: BATANGAS CITY
d. PROVINCE: BATANGAS
e. DISTANCE (from PROJECT SITE): 42.00 KM



DISPOSAL SITE
a. BARANGAY : NAGTOCTOC
b. TOWN/CITY : LOBO
c. PROVINCE : BATANGAS
d. DISTANCE (from Project Site) : 260.00 m

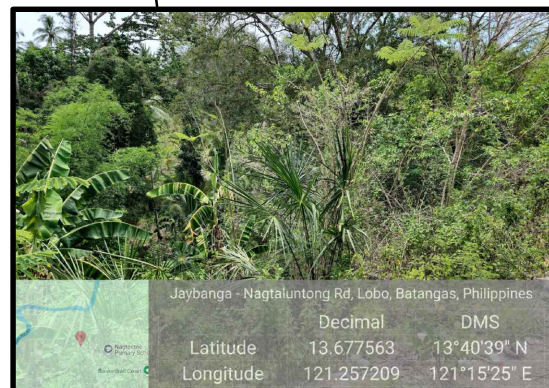


NAME OF SOURCE : NEW SEA AND LAND REALTY AND DEVELOPMENT CORPORATION
LOCATION:
a. STATION :
b. BARANGAY : TANGGOY
c. TOWN/CITY : BALAYAN
d. PROVINCE : BATANGAS
e. DISTANCE (from Project Site) : 60.00 km

LIST OF PRODUCT:
a. S1/ Fine Aggregates
b. Gravel : G-1, G-2 & 3
c. Conglomerate : 500 cu.m
d. Boulders/Cobbles: Boulders

PRODUCTION OUTPUT : 200.00 m³/day

OWNER : NEW SEA AND LAND REALTY AND DEVELOPMENT CORPORATION



PROJECT SITE
CONCRETING OF BRGY. NAGTOCTOC FMR, BRGY. NAGTOCTOC, LOBO, BATANGAS

LOCATION:
a. STATION :
b. BARANGAY: NAGTOCTOC
c. TOWN/CITY: LOBO
d. PROVINCE: BATANGAS



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PROJECT NAME AND LOCATION:

CONCRETING OF BRGY. NAGTOCTOC FMR, BRGY. NAGTOCTOC, LOBO, BATANGAS

LOBO, BATANGAS

SHEET CONTENT:

MATERIALS MAP AND DISPOSAL MAP

DRAFTED:

CHARLIE M. PEREZ
ENGINEER II

PREPARED:

CHRISTIAN S. BAGSIT
ENGINEER II

REVIEWED:

BRYAN EDWARD R. ANDAL
ENGINEER II

DATE:

SUBMITTED:

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APPROVED:

SONIA D. PAGLICAUAN
DISTRICT ENGINEER

DATE:

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3 8

SHEET NO.

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GENERAL NOTES

1.0 STANDARD SPECIFICATION

1.1 ALL WORKS SHALL COMPLY WITH THE DPWH DESIGN GUIDELINES, CRITERIA AND STANDARDS (DGCS), VOLUME 4, 2015 EDITION, AASHTO GUIDE ON PAVEMENT DESIGN, 1993 EDITION AND DPWH STANDARD SPECIFICATION FOR HIGHWAY, BRIDGES AND AIRPORTS, 2013 EDITION

2.0 DIMENSIONS

2.1 UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN METERS.
2.2 DIMENSIONS ON STANDARD DRAWINGS AND DRAINAGE ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED.

3.0 STATIONING

3.1 THE ROAD STATIONS AND ELEMENTS OF CURVES ARE RELATIVE TO THE ULTIMATE CENTERLINE OF THE ROAD UNLESS OTHERWISE INDICATED
3.2 EQUATION OF STATIONS WHEN USED (BACK STATION/ AHEAD STATION) ARE PROVIDED AT THE BEGINNING OR END OF THE CURVE AND/ OR AT FULL STATION.
3.3 FOR WIDENING WORKS, THE FINISHED ROAD LEVEL CROSS SLOPE AND SUPERELEVATION RATES SHALL BE BASED ON THE EXISTING PAVEMENT.

4.0 HORIZONTAL ALIGNMENTS AND GRADES

4.1 THE HORIZONTAL ALIGNMENT SHOWN IN THESE DRAWINGS FOLLOWS THE LONGITUDINAL JOINT OF THE PORTLAND CEMENT CONCRETE PAVEMENT (WHICH IS DEFINED AS THE EXISTING CENTERLINE) WITH MINOR DEVIATION DUE MAINLY TO SOME CONSTRUCTION ERRORS DURING ORIGINAL CONSTRUCTION STAGE. MINOR ADJUSTMENT MAYBE MADE AS DIRECTED BY THE ENGINEER TO SUIT THE ACTUAL FIELD CONDITION.

5.0 HORIZONTAL CONTROL

5.1 BASIC TRAVERSE STATIONS WERE ESTABLISHED BASED ON STATIONS OF EXISTING KM POST AND EXISTING PERMANENT STRUCTURES AT THE PROJECT SITE.
5.2 GRID COORDINATES USED IN THIS PROJECT WAS BASED FROM TRUE NORTH AT BM1 COORDINATES OF N = 1,512,675.82, E = 527,691.66.

6.0 VERTICAL CONTROL

6.1 ELEVATIONS WERE ASSUMED AT THE FIRST BENCHMARK AT THE BEGINNING OF EACH SECTION OF THE PROJECT.
6.2 BENCHMARKS WERE ESTABLISHED AT EXISTING UNDISTURBED STRUCTURES AT DIFFERENT INTERVALS ALONG THE PROJECT.
6.3 ELEVATIONS WERE BASED ON THE TRUE ELEVATION, Z = 155.58.

7.0 DRAINAGE STRUCTURE

7.1 EXACT LOCATIONS, SLOPES, OUTFALL & INVERT ELEVATIONS OF DRAINAGE STRUCTURES SHALL BE CHECKED IN THE FIELD BY THE ENGINEER, MINOR ADJUSTMENTS MAY BE MADE WITH THE APPROVAL OF THE ENGINEER TO SUIT FIELD CONDITIONS.
7.2 ANY REVISIONS, REMOVAL AND/OR RELAYING DRAINAGE STRUCTURES AS DIRECTED BY THE ENGINEER TO SUIT EXISTING FIELD CONDITIONS SHALL BE CONSIDERED AS SUBSIDIARY WORK PERTAINING TO OTHER CONTRACT ITEMS. NO DIRECT PAYMENT SHALL BE MADE FOR THIS WORK UNLESS OTHERWISE SPECIFICALLY IDENTIFIED FOR PAYMENT IN THE SCHEDULE.
7.3 EXISTING DRAINAGE STRUCTURES OR PART THEREOF REMOVED BY THE CONTRACTOR THAT ARE STILL SERVICEABLE SHALL BE TURNED OVER TO THE GOVERNMENT & SHALL BE DEPOSITED AT A PLACE WITHIN THE PROJECT SITE DESIGNATED WITHOUT ANY EXTRA COMPENSATION. EXTREME PRECAUTION SHALL BE THE EXERCISED BY THE CONTRACTOR NOT TO DAMAGE THESE MATERIALS DURING THE REMOVAL & HANDLING.

8.0 ROAD CONNECTIONS & PRIVATE ENTRANCES

8.1 APPROACHES & ROAD CONNECTIONS SHALL BE CONSTRUCTED BY THE CONTRACTOR AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER IN SUCH A MANNER TO INSURE SMOOTH CONNECTIONS & RIDING QUALITY.
8.2 DESIGN OF THE ROAD WAS BASED ON THE FINAL HIGHWAY LOCATION SURVEY.
8.3 WIDENING ON CURVES SHALL BE DETERMINED BY THE ENGINEER IN-CHARGE TO SUIT EXSITING FIELD CONDITION.

9.0 REMOVAL OF EXISTING STRUCTURES AND OBSTRUCTIONS

9.1 ALL WORKS SHALL COMPLY WITH ITEM 101 OF THE STANDARD SPECIFICATION FOR HIGHWAYS, BRIDGES, AND AIRPORTS 2013 EDITION.
9.2 PORTION OF ANY UTILITIES SUCH AS WATERFALLS, IRRIGATION CHANNEL, TELEPHONE POSTS AND TRUNKS LINES ETC. THAT MAY CAUSE OBSTRUCTION TO CONSTRUCTIONS SHALL BE RELOCATED BY THE ENTITY/ OWNER CONCERNED; EXTREME CAUTION SHALL BE TAKEN BY THE CONTRACTOR NOT TO DAMAGE ANY SECTION OF THE EXISTING PUBLIC UTILITIES DURING CONSTRUCTION. ANY DAMAGE THEREOF SHALL BE ON THE ACCOUNT OF THE CONTRACTOR.
9.3 REMOVAL AND RE-INSTALLATION OF LOCATIONAL REFERENCE POINT (LRP) MONUMENTS SHALL BE IN COORDINATION WITH RBIA PERSONNEL.
9.4 IN CASE THERE ARE HOUSES WITHIN THE RIGHT OF WAY LIMITS WHICH MIGHT OBSTRUCT THE CONSTRUCTION, THEY SHOULD BE REMOVED BY THE CONTRACTOR. COST OF REMOVAL SHALL BE PAID UNDER SPECIFIC ITEM OF WORK.

10.0 RIGHT OF WAY

10.1 ROAD CLASSIFICATION DICTATES THE RIGHT OF WAY LIMITS.

11.0 ROAD SIGNS AND PAVEMENT MARKINGS

11.1 ROAD SIGNS SHALL CONFORM WITH THE HIGHWAY SAFETY DESIGN STANDARDS PART 2: ROAD SIGNS AND PAVEMENT MARKINGS MANUAL OF THE DEPARTMENT OF PUBLIC WORKS AND HIGWAYS, SERIES OF 2012.

12.0 BP 344 ACCESSIBILITY LAW

12.1 PROVISION OF BATAS PAMBANSA BILANG 344 (ACCESSIBILITY LAW) AND ITS IMPLEMENTING RULES AND REGULATIONS. THE IMPLEMENTING OFFICE SHALL IDENTIFY THE LOCATIONS OF AND PROVIDE ACCESSIBILITY FACILITIES FOR PERDONS WITH DISABILITY IN ACCORDANCE WITH D.O. 37, SERIES OF 2009.

13.0 OTHERS

13.1 WHEN SOIL AT LOWER PORTION OF THE SLOPE IS REQUIRED TO BE REMOVED, EXCAVATION SHOULD BE DONE AT THE HEAD PORTION FIRST PROGRESSING TOWARDS THE BOTTOM IN ORDER TO MAINTAIN THE STABILITY OF LANDSLIDE AND SLOPE FAILURE AREA.
13.2 THIS PLAN WILL SERVE ONLY AS A GUIDE IN THE IMPLEMENTATION PARTICULARLY IN THE PRE-CONSTRUCTION STAGE. IT IS ALSO SUBJECTED TO AN "AS-STAKED" SURVEY TO BE CONDUCTED JOINTLY BY THE IMPLEMENTING OFFICE AND THE CONTRACTOR AND SUBSEQUENT PLAN BE PREPARED AND SUBMITTED FOR APPROVAL.

ABBREVIATIONS :

ACP	ASPHALT CONCRETE PAVEMENT	M	METER
AZIM	AZIMUTH	Max	MAXIMUM
BLDG	BUILDING	MH	MANHOLE
BM	BENCH MARK	mm	MILLIMETER
BQ	BILL OF QUANTITIES	Mn	MIDDLE ORDNATE
BR	BRIDGE	MUN	MUNICIPAL
BRDY	BOUNDARY	MWSS	MANILA WATER SEWERAGE SYSTEM
BRGY	BARANGAY	NB	NORTH BOUND
BVCE	BEGIN OF VERTICAL CURVE ELEV.	O.C.	ON CENTER
BVCS	BEGIN OF VERTICAL CURVE STATION	OIE	OUTLET INVERT ELEVATION
BW	BOTHWAYS	PC	POINT OF CURVATURE
CEP	CONCRETE ELECTRIC POST	PCCP	PORTLAND CONCRETE CEMENT PAVEMENT
CM	CURB INLET MANHOLE	PI	POINT OF INTERSECTION
CL	CENTERLINE	PT	POINT OF TANGENCY
cm	CENTIMETER	PVI	POINT OF VERTICAL INTERSECTION
CS	CURB TO SPIRAL	PVC	POINT OF VERTICAL CURVE
CTP	CONCRETE TELEPHONE POST	PVT	POINT OF VERTICAL TANGENCY
CU	CULVERT	R	RADIUS
D	DEGREE OF CURVE	RC	REINFORCED CONCRETE
DIST	DISTANCE	RCBC	REINFORCED CONCRETE BOX CULVERT
DLI - 01	DRAINAGE MANHOLE MEMBER	RCPC	REINFORCED CONCRETE PIPE CULVERT
DPWH	DEPARTMENT OF PUBLIC WORKS AND HIGHWAY	RD	ROAD
E	EXTERNAL DISTANCE/EASTING	RROW	ROAD RIGTH - OF - WAY
e	SUPERELEVATION	RT	RIGHT
EB	EAST BOUND	S	NORMAL CROSSFALL
ELEV	ELEVATION	SB	SOUTH BOUND
EXTG.	EXISTING	SHLDR	SHOULDER
g	GRADIENT	STA	STATION
GV	GATE VALVE	STD	STANDARD
HOR	HORIZONTAL	STP	STEEL TELEPHONE POST
I	INTERSECTION ANGLE	SW	SOUTH WEST
I I E	INLET INVERT ELEVATION	T	TANGENT
INTL	INTERNATIONAL	TBM	TEMPORARY BENCH MARK
KMS	KILOMETERS	VC	VERTICAL CURVE
L	LEFT/LENGTH	VERT. V	VERTICAL
Lc	LENGTH OF HORIZONTAL CURVE	W	WIDENING
Lm	LINEAR METER	WB	WEST BOUND
LP	STEEL LIGHT POST	WW	WINGWALL
LT	LEFT	Ø	DIAMETER
LVC	LENGTH OF VERTICAL CURVE	N C	NORMAL CROWN

LEGEND :

	ROUTED RIPRAP EXISTING		BOX CULVERT EXISTING
	STONE MASONRY		BOX CULVERT NEW
	CUT AND FILL SECTION		PLAN FULL KM STATION
	ROAD SIGN		PROJECT ROAD
	TREES		EXISTING BRIDGE
	POINT OF INTERSECTION		RIVER / CREEK
	ORIGINAL GROUND		COMMERCIAL
	KILOMETER POST		REFERENCE POINT
	NORTH SIGN		STATION
	BENCH MARK		LENGTH OF VERTICAL CURVE
	RECTANGULAR CULVERT		RROW
	FLOW		PROPOSED BRIDGE
	PIPE CULVERT EXISTING		EXISTING PAVEMENT
	PIPE CULVERT NEW		PARAPET WALL PLAN
	GATE VALVE		ROAD WIDENING
	STEEL LIGHT POST		CONTOUR-MAJOR
	CONCRETE ELECTRIC POST		CONTOUR-MINOR
	MANHOLE		SIGN POST
	DEEP WELL		PLOT
	GATE		STEEL TELEPHONE POST
	TRANSCO		CONCRETE TELEPHONE POST
	CURB INLET		MANILA WATER SEWERAGE SYSTEM



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PROJECT NAME AND LOCATION:

CONCRETING OF BRGY. NAGTOCTOC FMR, BRGY.
NAGTOCTOC, LOBO, BATANGAS

LOBO, BATANGAS

SHEET CONTENT:

GENERAL NOTES
ABBREVIATIONS
LEGENDS

DRAFTED:

CHARLIE M. PEREZ
ENGINEER II

PREPARED:

CHRISTIAN S. BAGSIT
ENGINEER II

REVIEWED:

BRYAN EDWARD R. ANDAL
ENGINEER II

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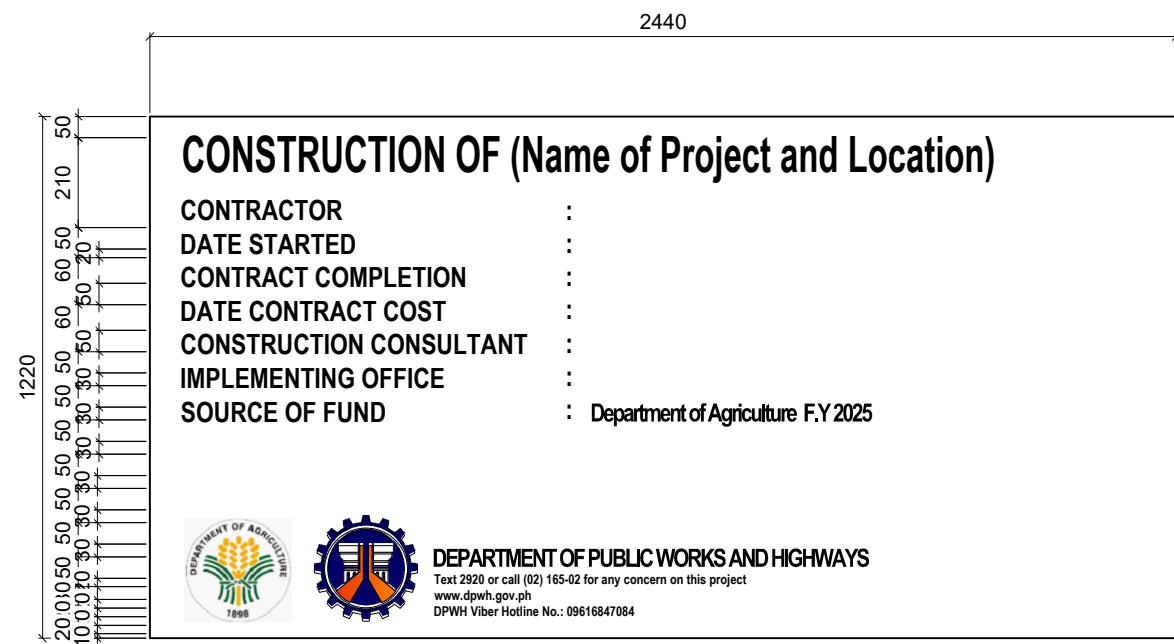
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SUMMARY OF QUANTITIES

ITEM NO.	DESCRIPTION	QTY	UNIT	REMARKS
PART A	FACILITIES FOR THE ENGINEER			
A.1.1 (8)	Provision of Field Office for the Engineer (Rental Basis)	5.00	Month	
A.1.4 (1)	Provision of Progress Photographs	5.00	Month	
PART B	OTHER GENERAL REQUIREMENTS			
B.5	Project Billboard / Signboard	2.00	Each	"1 Each" corresponds to a set of 1 DPWH and 1 COA Billboard
B.7 (2)	Occupational Safety and Health Program	1.00	Lump Sum	
B.8 (1)	Traffic Management	5.00	Month	
B.9	Mobilization / Demobilization	1.00	Lump Sum	
B.16	Recognition Plate/Project Marker	2.00	Each	
PART C	EARTHWORK			
100 (1)	Clearing and Grubbing	0.16	ha.	
102 (2)	Surplus Common Excavation	2,281.63	cu.m.	
102 (3) a	Surplus Rock Excavation, Soft	2,471.20	cu.m.	
104 (1) a	Embankment from roadway/structure excavation, Common Soil	301.50	cu.m.	
105 (1) a	Subgrade Preparation, Common Material	1,560.00	sq.m.	
PART D	SUBBASE AND BASE COURSE			
200 (1)	Aggregate Subbase Course	353.28	cu.m.	
PART E	SURFACE COURSES			
311 (1) b1	Portland Cement Concrete Pavement (Unreinforced), 0.20 m thick, 14 days	1,300.00	sq.m.	
PART G	DRAINAGE AND SLOPE PROTECTION STRUCTURES			
500 (1) b	Pipe Culvert, Class II, RCPC	14.00	l.m.	
506 (1)	Stone Masonry	282.79	cu.m.	

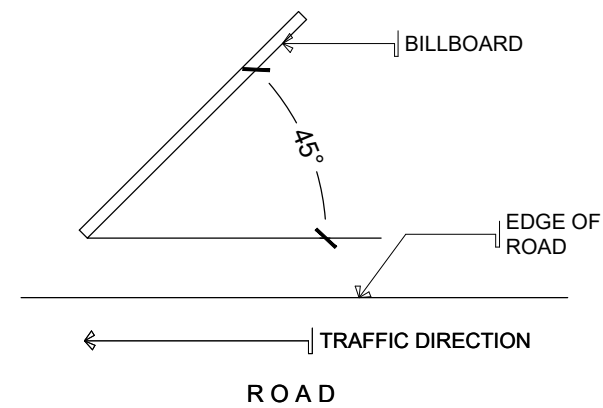


DPWH STANDARD PROJECT BILLBOARD

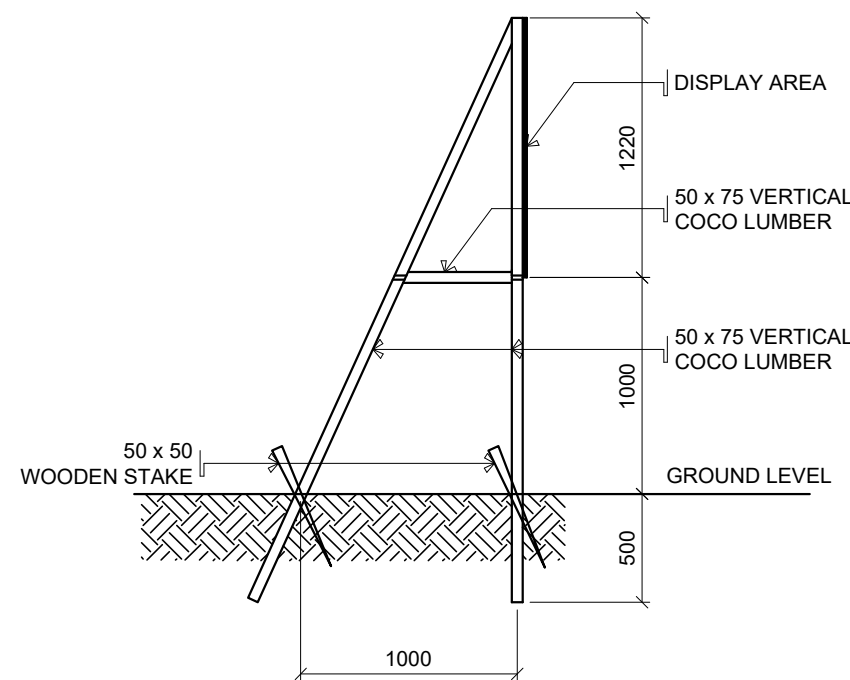
NOTES:

AS PER DEPARTMENT ORDER NO. 021 SERIES OF 2017

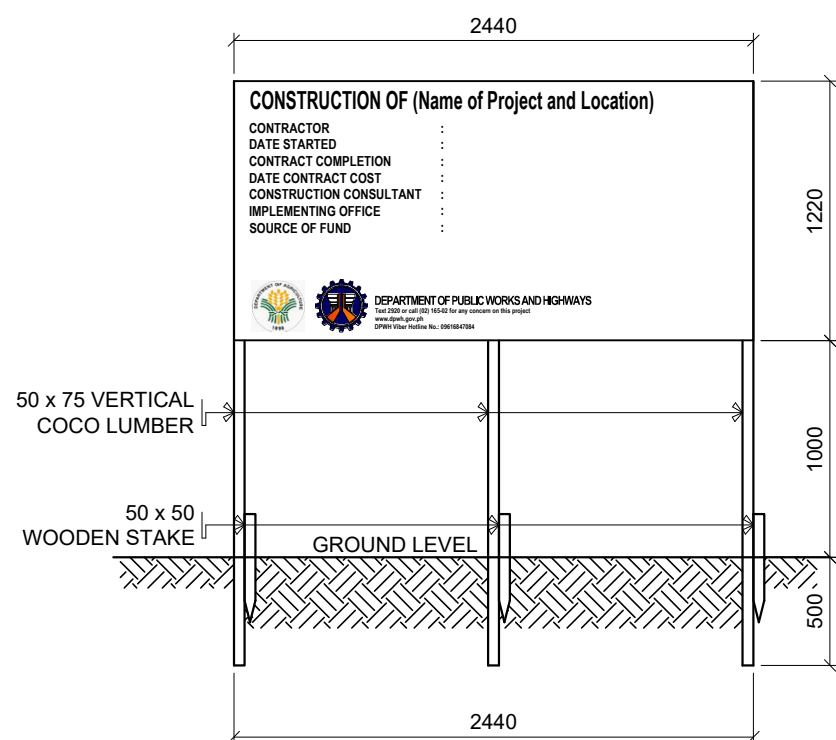
1. THE NEW BILLBOARD DESIGN LAYOUT AND DIMENSION (SEE DRAWING) SHALL BE INSTALLED ON A STANDARD BILLBOARD MEASURING 1220mm. x 2440mm. USING 12mm. (1/2 inch) THICK MARINE PLYWOOD OR TARPAULIN POSTED ON 5mm. (3/16 inch) MARINE PLYWOOD.
2. FOR EACH BUILDING PROJECT, THE BILLBOARD SHALL BE INSTALLED IN FRONT OF THE PROJECT SITE.
3. FOR EACH ROAD/BRIDGE/FLOOD CONTROL PROJECT, TWO BILLBOARDS SHALL BE INSTALLED, I.E., ONE AT THE BEGINNING AND ONE AT THE END OF THE PROJECT.
4. FOR ROAD PROJECTS WITH LENGTH OF 10 KILOMETERS OR MORE, BILLBOARD(S) SHALL ALSO BE INSTALLED AT EVERY 5 KILOMETERS INTERVAL.
5. NAME(S) AND/OR PICTURE(S) OF ANY PERSONAGES SHOULD NOT APPEAR IN THE BILLBOARD.
6. NO POLITICAL BILLBOARDS SHALL BE ALLOWED TO BE INSTALLED 100 METERS BEFORE AND 100 METERS AFTER ALL DPWH PROJECTS AND IN BETWEEN THE PROJECT LIMITS OR WITHIN THE ROAD RIGHT-OF-WAY.
7. DPWH CONTRACTORS SHALL NOT BE ALLOWED TO PLACE NAMES OF POLITICIANS ON THEIR EQUIPMENT OR CARRY POLITICAL BILLBOARD ON THEIR EQUIPMENT.



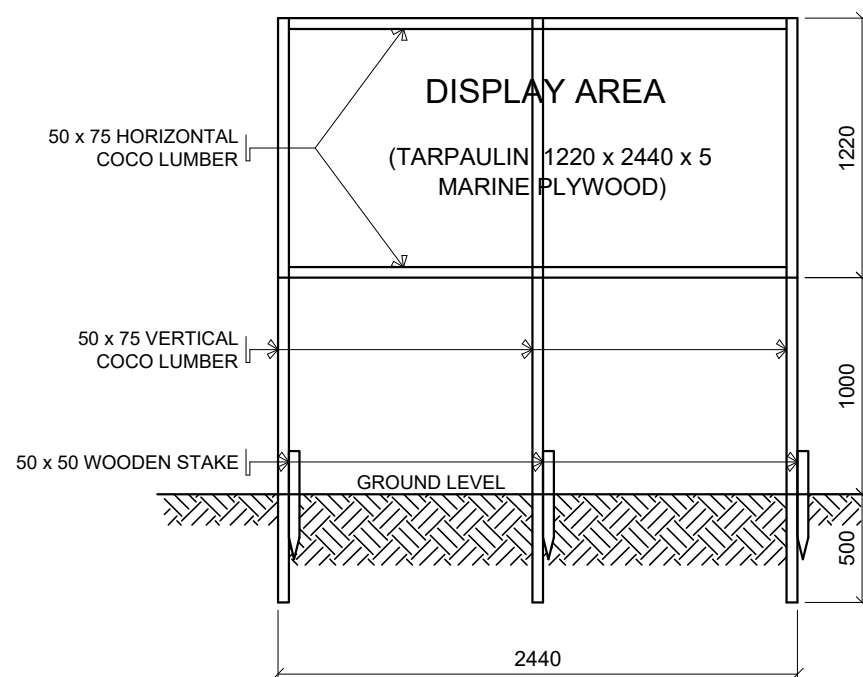
ORIENTATION



TYPICAL FRAME ELEVATION



FRONT ELEVATION



REAR ELEVATION

2440

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
BATANGAS 2ND DISTRICT ENGINEERING OFFICE

Project : _____ Cost : _____
Location : _____ Fund Source/s : Department of Agriculture F.Y 2025

Implementing Agency/ies : _____
Development Partner/s : _____
Contractor/Supplier : _____
Brief Description of Project : _____

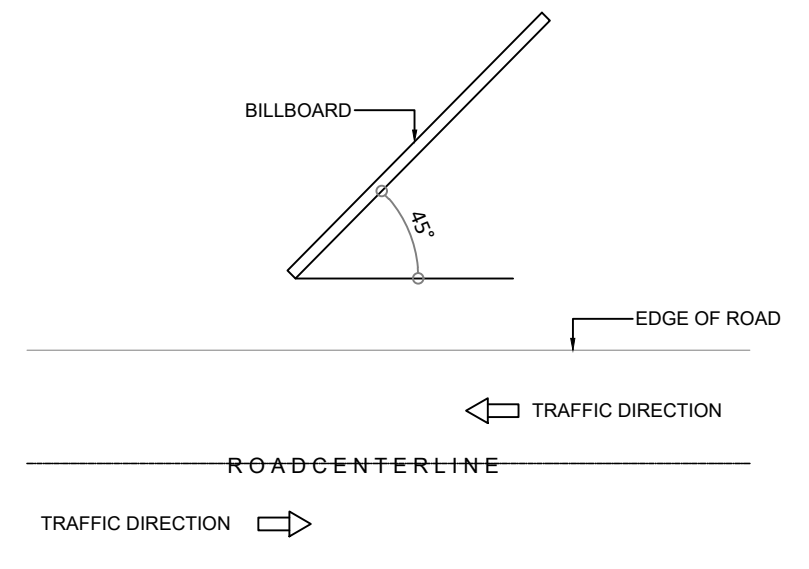
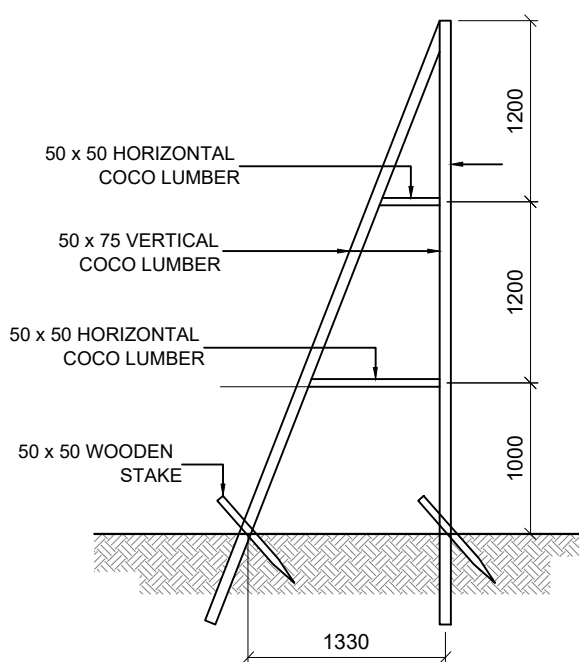
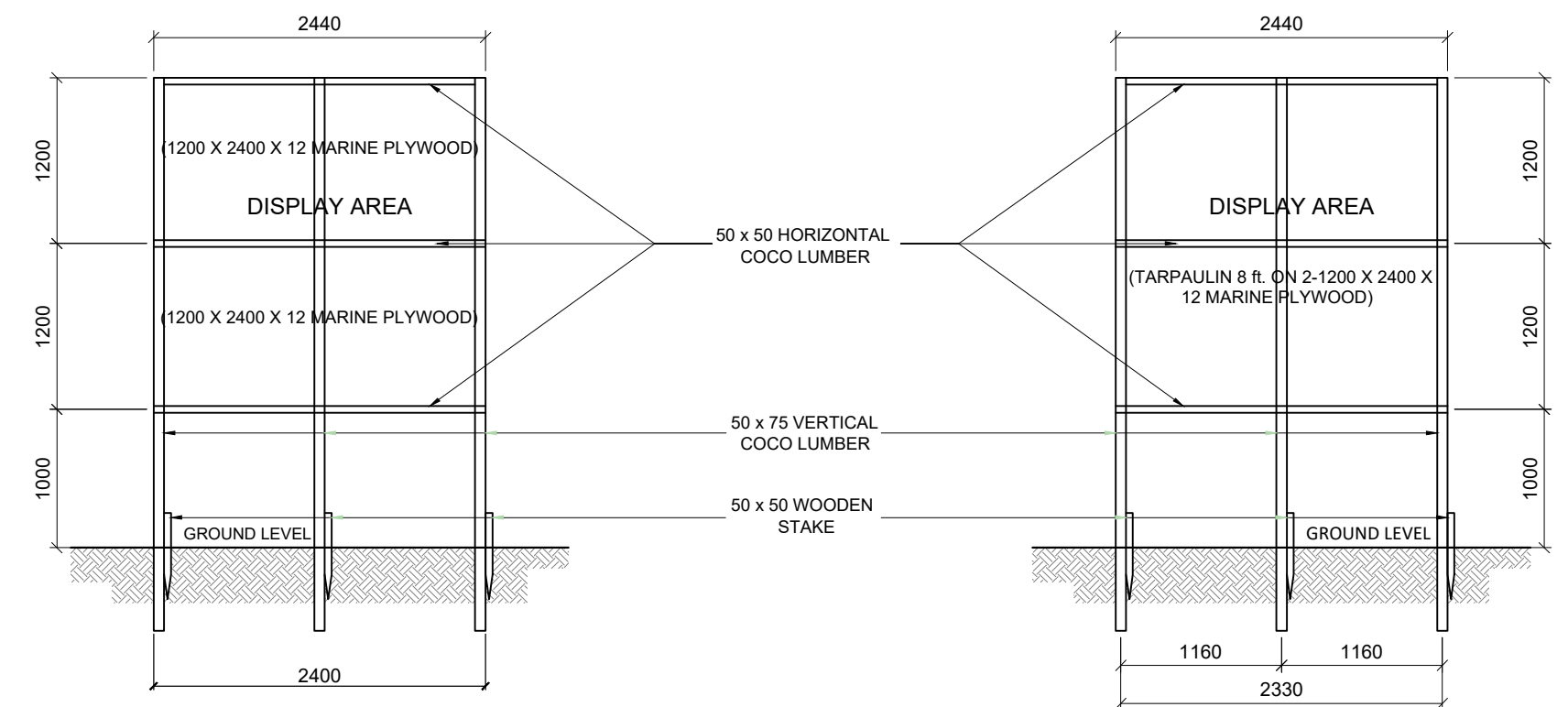
Project Date			Project Status				
Duration	Started	Target Date of Completion	Percentage of Completion	As of (Date)	Cost Incurred to Date	Date Completed	Remarks

For particulars or complaints about this project, please contact the Regional Office or Cluster which has audit jurisdiction on this project :
COA Regional Office No./Cluster : _____
Address : _____
Contact No. : _____ or Text COA Citizen's Desk at 0915-5391957

SPECIFICATION :

TARPAULIN, WHITE, 8 ft x 8 ft
RESOLUTION : 70 DPI
FONT : HELVETICA
FONT SIZE : MAIN INFORMATION - 3"
FONT COLOR : BLACK

COA STANDARD PROJECT BILLBOARD



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PROJECT NAME AND LOCATION:

CONCRETING OF BRGY. NAGTOCTOC FMR, BRGY.
NAGTOCTOC, LOBO, BATANGAS

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SHEET CONTENT:

PROJECT BILLBOARD DETAILS

DRAFTED:

CHARLIE M. PEREZ
ENGINEER II

PREPARED:

CHRISTIAN S. BAGSIT
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BRYAN EDWARD R. ANDAL
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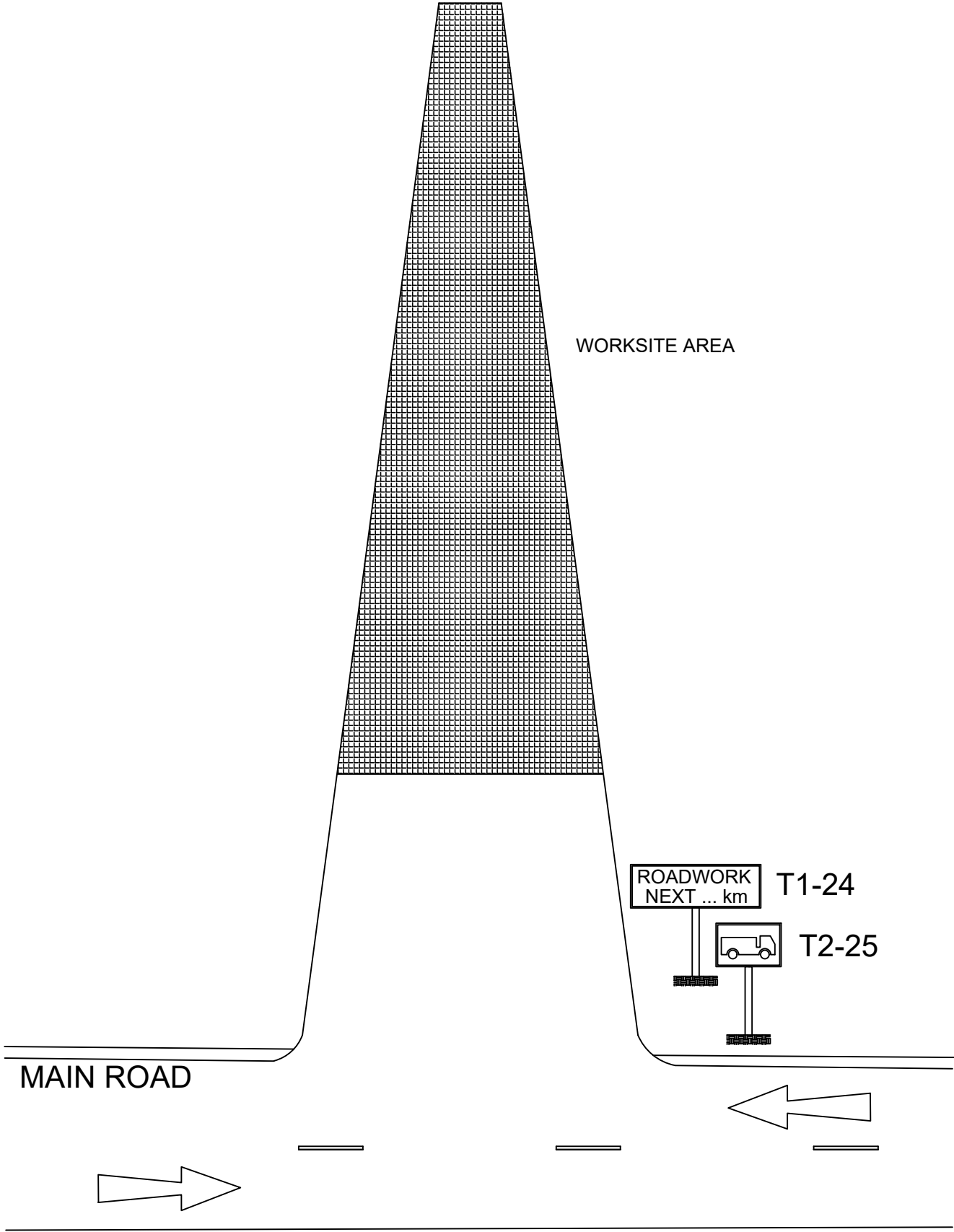
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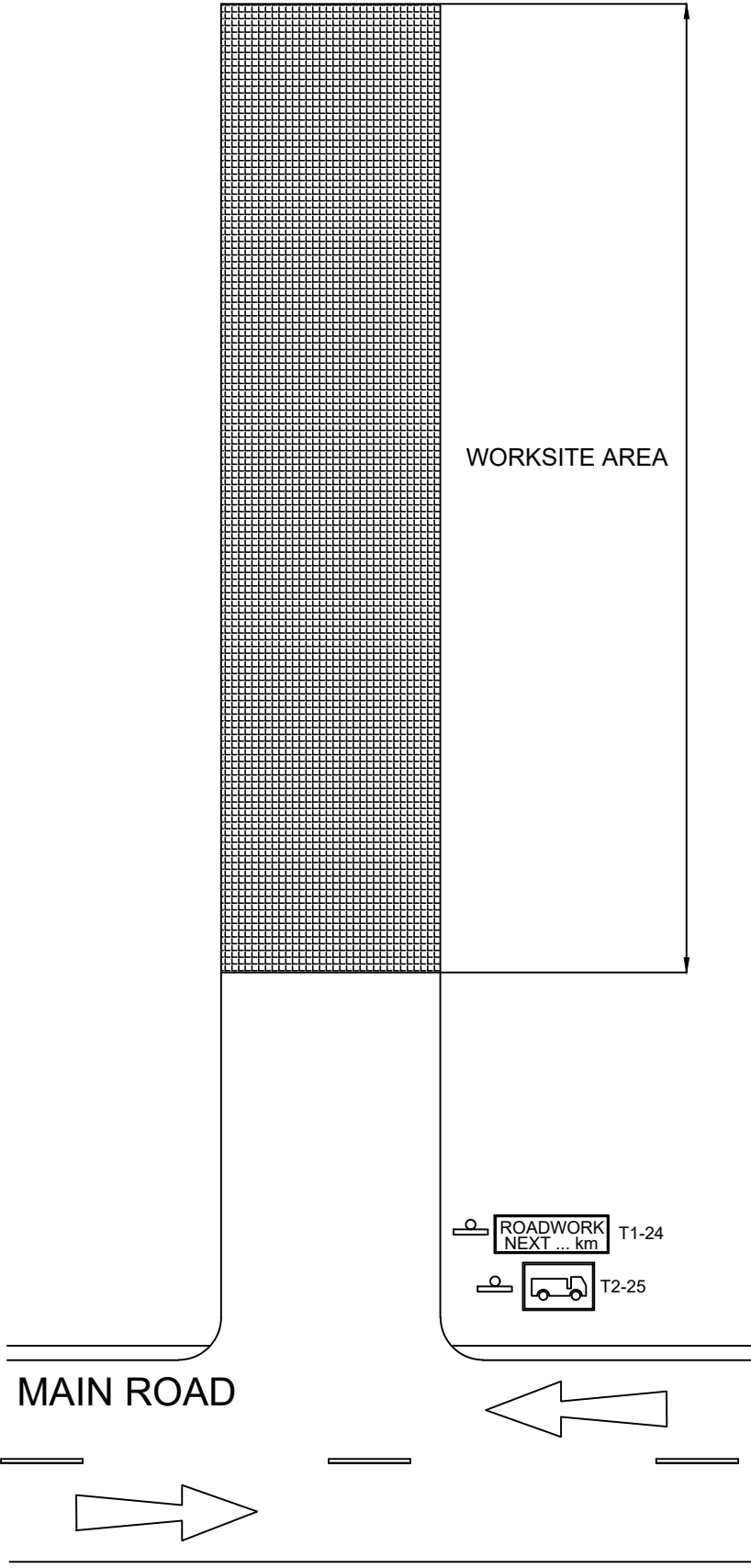
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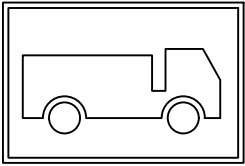
PERSPECTIVE VIEW



PLAN

ROADWORK
NEXT ... km

T1-24



T2-25

ROADWORK NEXT ... km

Sign No.	Size	Letter	Background
T1-24	1800 x 600	Line 1 - Black 200 DM Line 2 - Black 160 DM	Yellow Reflectorized

TRUCKS ENTERING

Sign No.	Size	Symbol	Background
T2-25	900 x 600	Black	Yellow Reflectorized

ROADWORKS SIGN

TRAFFIC MANAGEMENT PLAN



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
REGIONAL OFFICE No. IV-A
BATANGAS 2ND DISTRICT
ENGINEERING OFFICE
KUMINTANG ILAYA, BATANGAS CITY

PROJECT NAME AND LOCATION:

CONCRETING OF BRGY. NAGTOCTOC FMR, BRGY.
NAGTOCTOC, LOBO, BATANGAS

LOBO, BATANGAS

SHEET CONTENT:

TRAFFIC MANAGEMENT PLAN

DRAFTED:

CHARLIE M. PEREZ
ENGINEER II

PREPARED:

CHRISTIAN S. BAGSIT
ENGINEER II

REVIEWED:

BRYAN EDWARD R. ANDAL
ENGINEER II

DATE:

SUBMITTED:

GEMMA L. OLAN
CHIEF, PLANNING AND DESIGN SECTION

DATE:

RECOMMENDED:

ARIEL V. ARMEDILLA
ASSISTANT DISTRICT ENGINEER

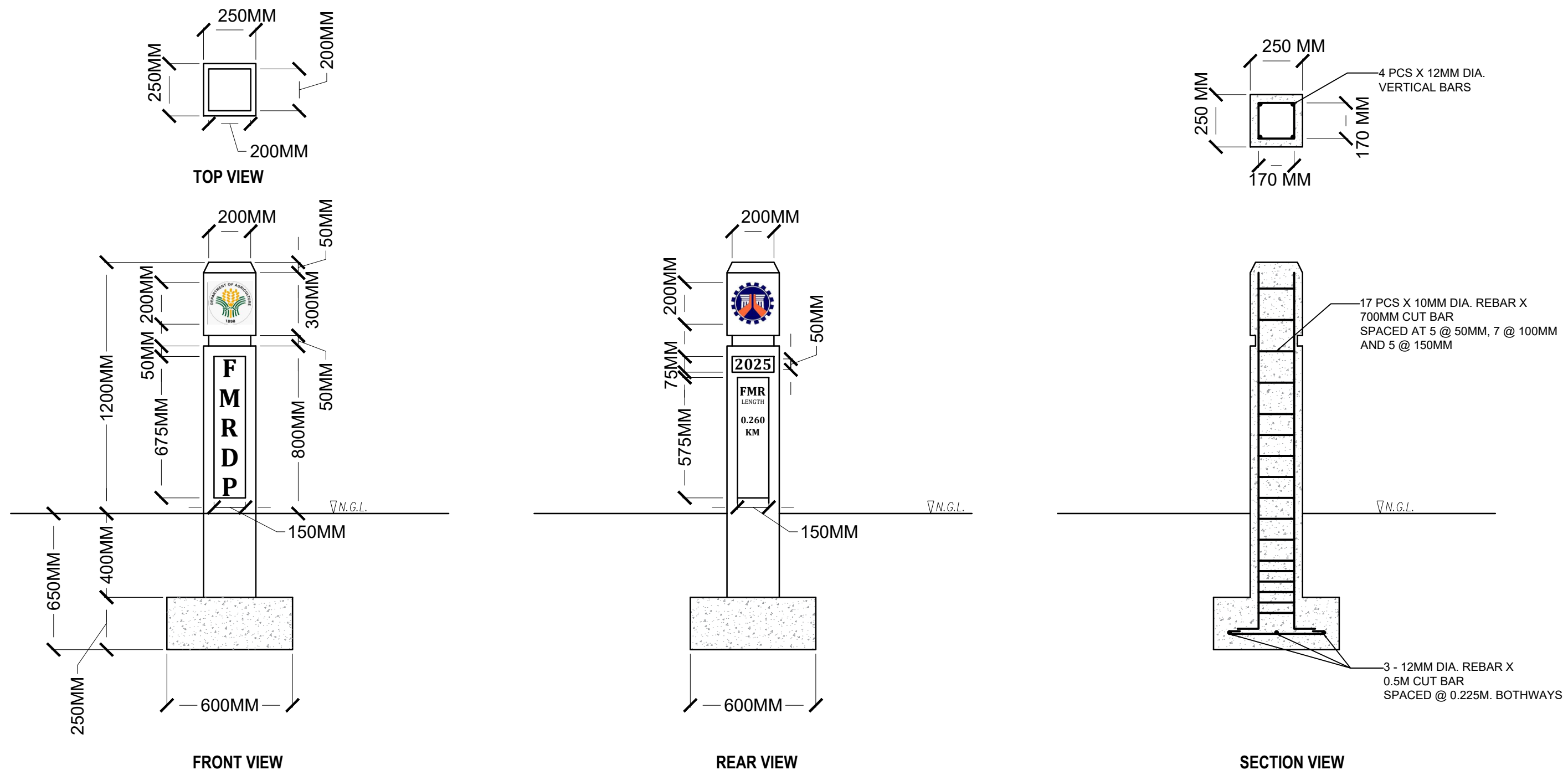
DATE:

APPROVED:


SONIA D. PAGLICAUAN
DISTRICT ENGINEER

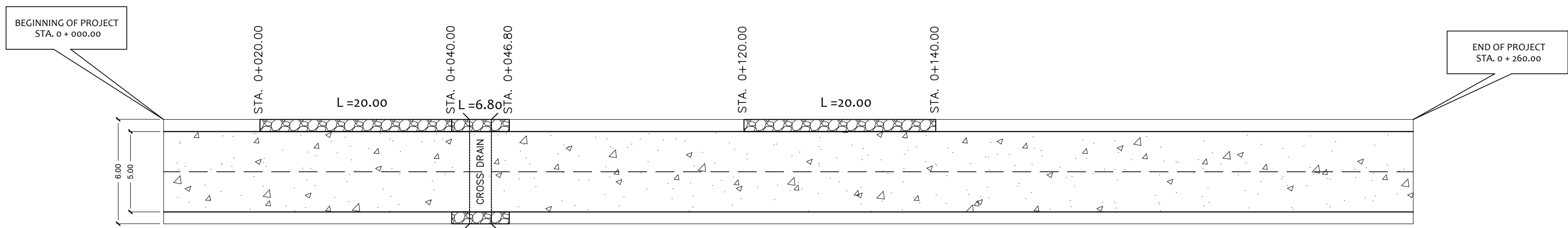
DATE:

SET NO.	SHEET NO.
<div>G 7 8</div>	<div>7 20</div>



FARM-TO-MARKET-ROAD MARKER
SCALE 1:20 MTS.

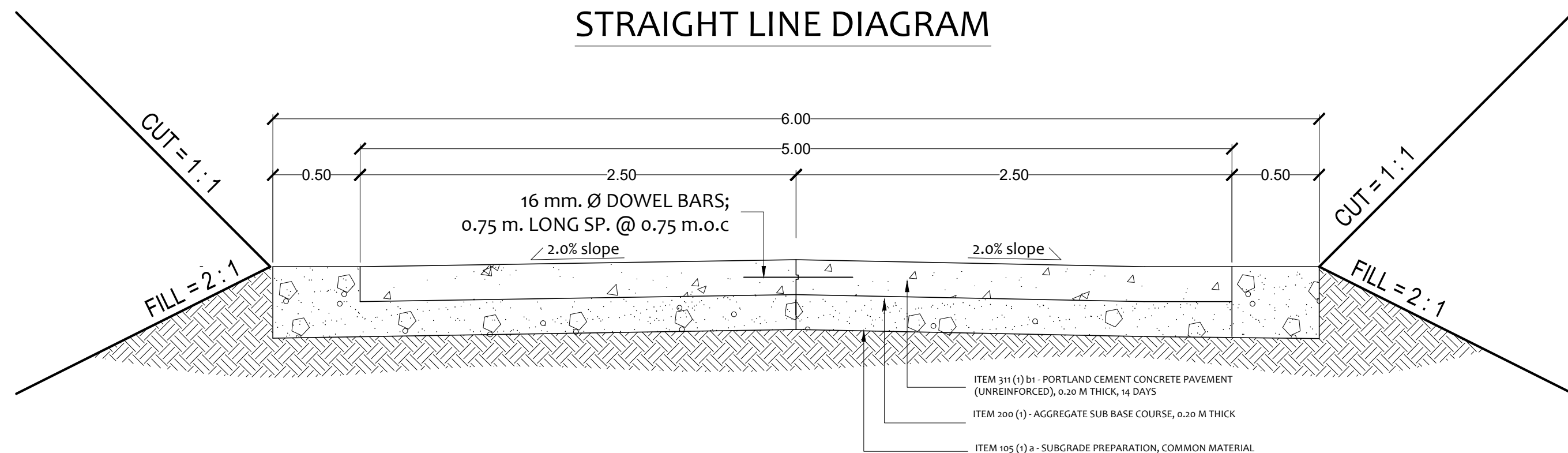
 <div>REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS REGIONAL OFFICE No. IV-A BATANGAS 2ND DISTRICT ENGINEERING OFFICE KUMINTANG ILAYA, BATANGAS CITY</div>	PROJECT NAME AND LOCATION:	SHEET CONTENT:	DRAFTED:	REVIEWED:	SUBMITTED:	RECOMMENDED:	APPROVED:	SET NO.	SHEET NO.
	CONCRETING OF BRGY. NAGTOCTOC FMR, BRGY. NAGTOCTOC, LOBO, BATANGAS LOBO, BATANGAS	PROJECT MARKER DETAILS	CHARLIE M. PEREZ ENGINEER II PREPARED: CHRISTIAN S. BAGSIT ENGINEER II	BRYAN EDWARD R. ANDAL ENGINEER II DATE:	GEMMA L. OLAN CHIEF - PLANNING AND DESIGN SECTION DATE:	ARIEL V. ARMEDILLA ASSISTANT DISTRICT ENGINEER DATE:	SONIA D. PAGLICAUAN DISTRICT ENGINEER DATE:	<div>G88</div>	<div>820</div>



LENGTH = 260.00 L.M.

LEGEND:

- PCCP
- SHOULDER
- STONE MASONRY



TYPICAL CROSS SECTION

SCALE: 1:25 M.



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
REGIONAL OFFICE No. IV-A
BATANGAS 2ND DISTRICT
ENGINEERING OFFICE
KUMINTANG ILAYA, BATANGAS CITY

PROJECT NAME AND LOCATION:
CONCRETING OF BRGY. NAGTOCTOC FMR, BRGY.
NAGTOCTOC, LOBO, BATANGAS
LOBO, BATANGAS

SHEET CONTENT:
TYPICAL CROSS SECTION
STRAIGHTLINE DIAGRAM

DRAFTED:
CHARLIE M. PEREZ
ENGINEER II
PREPARED:
CHRISTIAN S. BAGSIT
ENGINEER II

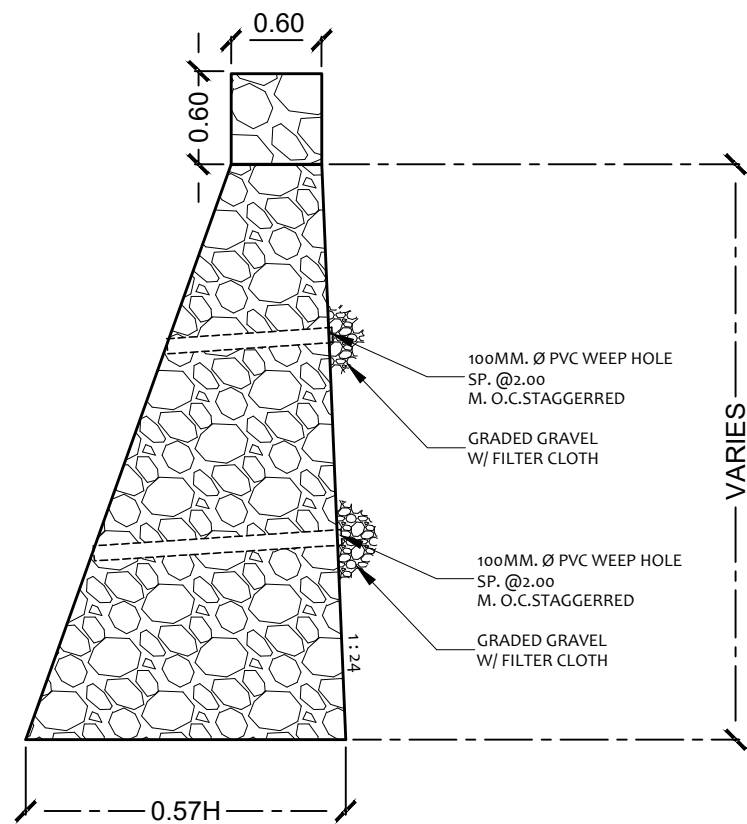
REVIEWED:
BRYAN EDWARD R. ANDAL
ENGINEER II
DATE:

SUBMITTED:
GEMMA L. OLAN
CHIEF - PLANNING AND DESIGN SECTION
DATE:

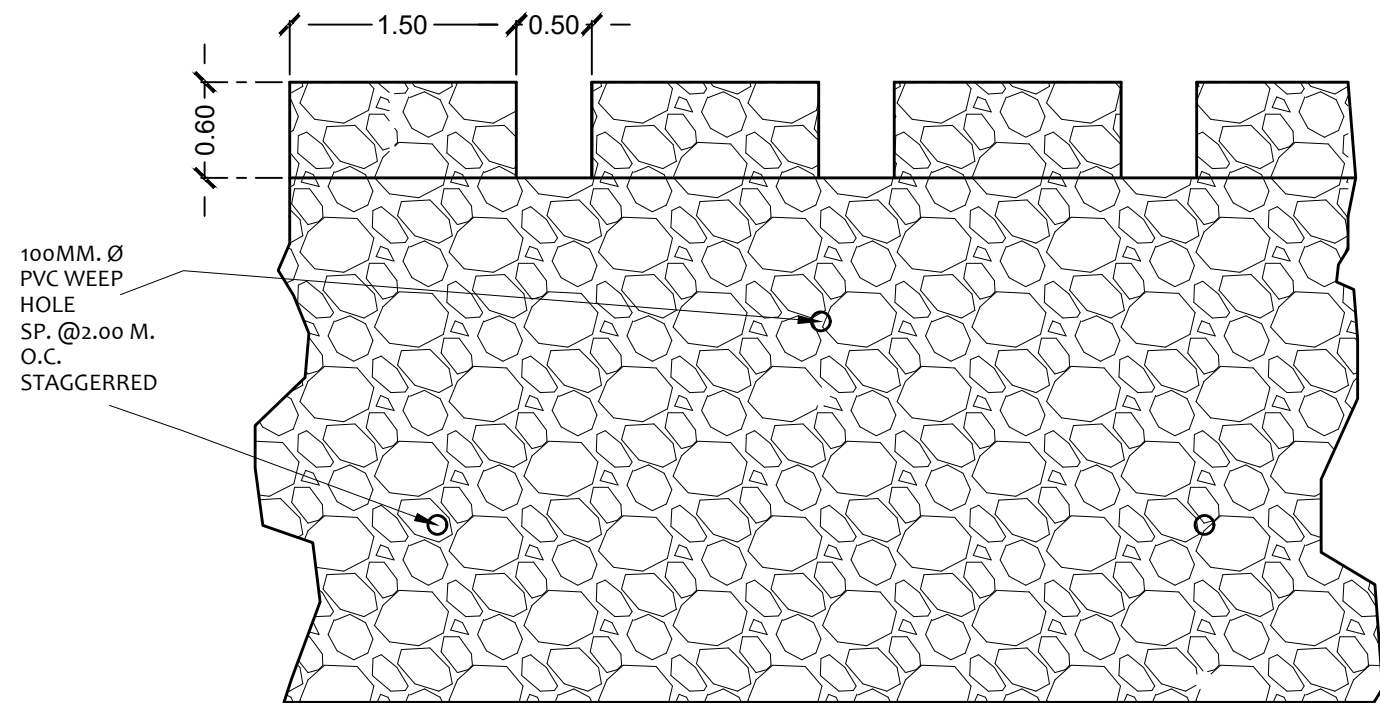
RECOMMENDED:
ARIEL V. ARMEDILLA
ASSISTANT DISTRICT ENGINEER
DATE:

APPROVED:
SONIA D. PAGLICAUAN
DISTRICT ENGINEER
DATE:

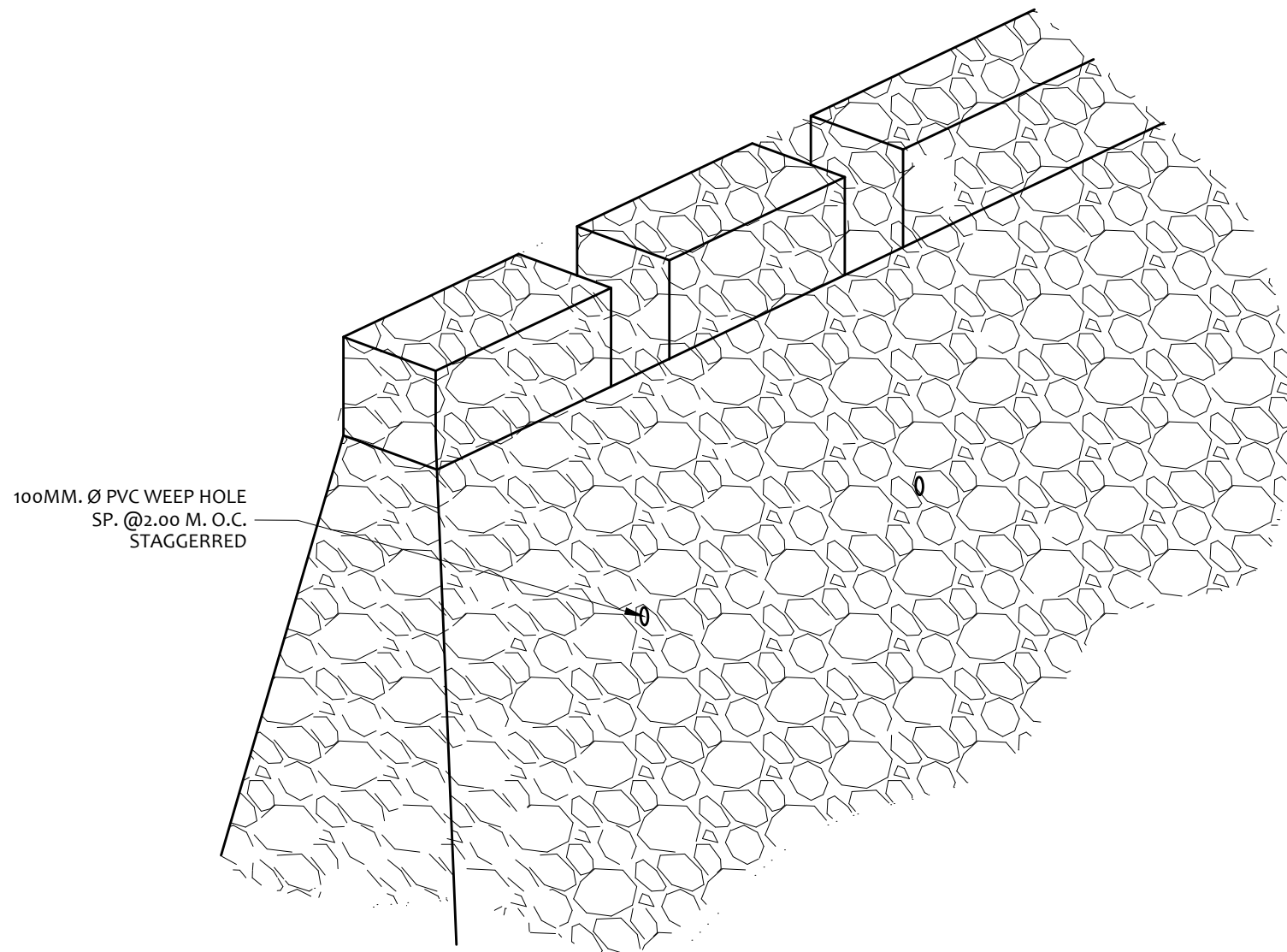
SET NO. SHEET NO.
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CROSS-SECTION



ELEVATION



PARAPET DETAIL

PERSPECTIVE VIEW

ITEM 506 - STONE MASONRY

The stone shall be clean, hard and durable and shall be subject to the engineer's approval, adobe stone shall not be used unless otherwise specified .

Unless other size are shown on the plans, stones have a thickness of not less than 150 mm, and widths of not less than one and one-half times their respective thickness, and lengths of not less than one and one half times their respective widths, each stone shall be of good shape and be free of depressions and projections that might weaken or prevent it from being properly bedded.

The stone shall be dressed to remove any thin or weak portions, face stones shall be dressed to provide bed and joint lines that do not vary more than 20 mm from the true lines and to ensure the meeting of bed and joint ines without line rounding of corners of the stones in excess of 30 mm in radius, bed surfaces of the face stones shall be approximately normal to the face of the stones for about 80 mm and from this point may depart from a normal plane not to exceed 50 mm to 300 mm.

SCHEDULE OF STONE MASONRY

LOCATION	LENTGH(m)	AVE. HEIGHT(m)	REMARKS
STA. 0+020.00 - STA. 0+040.00	20.00	3.75	L/S
STA. 0+120.00 - STA. 0+140.00	20.00	2.60	L/S

DETAIL OF STONE MASONRY

SCALE: 1:50 M.